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ABSTRACT

The Pennsylvania State Library's Office of Resource Sharing and Academic Libraries conducted a survey in 1986 to assess the needs of academic libraries in the state. Data were gathered via a questionnaire that was mailed to directors of 180 libraries at Pennsylvania postsecondary institutions offering at least a two-year degree. Usable responses were received from 82 directors for a 45.5% rate of return. A number of unmet needs were identified, including the needs for: (1) advocacy of academic library needs; (2) linked systems protocols; (3) telecommunications; (4) new technologies; and (5) preservation. Four focus groups of selected academic librarians then met to define and interpret survey results and formulate suggestions for ways in which the state library might deal with the unmet needs. These groups recommended that the office: (1) develop advocacy for academic libraries within state government and in the academic community; (2) develop a strong communications program; (3) provide leadership in statewide linked systems, telecommunications, and preservation initiatives; and (4) provide consultant assistance on local integrated systems, communications, new technologies, and preservation. Three tables present data on tests for difference between population and respondents; 13 high need priorities; and 13 unsatisfied need priorities. The questionnaire is appended together with marginal data, and 17 references/notes are provided. (CGD)

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DEVELOPING RELATIONSHIPS BETWEEN ACADEMIC LIBRARIES AND THE STATE LIBRARY OF PENNSYLVANIA: A REPORT OF RESEARCH WITH RECOMMENDATIONS

by

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EXECUTIVE SUMMARY

Relationships between academic libraries and state library agencies are increasingly important components of multitype cooperation. This study assesses the needs of academic libraries in Pennsylvania that can be addressed by the State Library's Office of Resource Sharing and Academic Libraries. Results from a mailed survey identify a number of unmet needs, including: advocacy of academic library needs; linked systems protocols; telecommunications; new technologies; and preservation: that can be addressed by the state library agency. Focus groups, composed of selected academic librarians, have discussed these unmet needs in some detail, confirming their validity and suggesting how the State Library might address them. Recommendations for the Office include: developing advocacy for academic libraries within state government and in the academic community; development of a strong communications program; leadership in statewide linked systems, telecommunications and preservation initiatives; provision of consultant assistance on local integrated systems, communications, new technologies and preservation.

Academic libraries and state library agencies are increasingly interdependent. Academic libraries look to state library agencies as one locus of coordination for needs that cross traditional, type of library boundaries. State library agencies regard academic libraries as important participants in information access and delivery. The purpose of this study is to assess the needs of academic libraries in Pennsylvania that can be addressed by the State Library of Pennsylvania and its' Office of Resource Sharing and Academic Libraries. The methodology and results described in this report may be of interest in other states where strengthened relationships between academic libraries and state library agencies are desired.

EMERGING RELATIONSHIPS

Not so long ago relationships between academic libraries and state library agencies were very limited. An academic library in a small, isolated community might also serve as the public library. A few state libraries had large enough collections to be considered research libraries. Occasional consultation might occur on limited topics such as interlibrary loan guidelines. But relationships were, for the most part, left fallow.

Changes in the environment are encouraging both academic libraries and state library agencies to develop stronger working relationships.[1] Academic libraries want to take advantage of new technologies, economy of scale and resource sharing that can

often be approached on a state or regional basis.[2] State library agencies want to encourage the effective use of all library resources in their respective states.[3]

Title III, Interlibrary Cooperation, of the Library Services and Construction Act (LSCA) has been the catalyst for developing relationships between academic libraries and state library agencies in many states. Added in July, 1966, Title III has provided state library agencies with Federal funds to encourage cooperation among libraries of all types. As the result of projects funded by LSCA-III, academic libraries and state library agencies in many states have forged relationships that help them meet their respective needs.[4] In many states, statutes have been passed, amended or interpreted to permit state library agencies to work directly with academic libraries.[5] Academic libraries and state library agencies in these states work directly together to address issues of mutual concern. Much of this work is accomplished through direct grants to consortia and libraries for specific activities. Other work is accomplished by committees, boards or the staff of the state agency or participating academic libraries. Relationships are expanding in scope making these relationships an increasingly important component in the environment of both institutions.

RELATIONSHIPS IN PENNSYLVANIA

The experience of Pennsylvania is one example of how

relationships have developed between academic libraries and a state library agency. With the funding of LSCA-III, the State Library of Pennsylvania began making grants for projects involving academic libraries. By 1975, a clear mutual interest in fostering resource sharing was addressed when the State Library began using LSCA-III funds to encourage more than 50 academic libraries to begin entering their holdings into the OCLC database. In 1972, the State Library began to subsidize the operations of the Interlibrary Delivery Service, a statewide, multitype courier service, that was created in 1969 with an LSCA-III grant to the Associated College Libraries of Central Pennsylvania.

Concurrently, the State Library included academic libraries in a series of studies and directories intended to enhance resource sharing throughout the Commonwealth. Academic libraries were included in the Directory of Pennsylvania Library Resources prepared under contract by the Drexel University Graduate School of Library Science in 1972.[6] Academic libraries were included in Federally funded planning documents such as the Pennsylvania Library Master Plan Committee Report of 1974 and Bibliographic Access in Pennsylvania of 1979.[7]

Over a fifteen year period, support developed to amend Pennsylvania law to permit the development of direct relationships between the State Library and academic libraries. With support from both the academic library community and the

State Library, this change was accomplished in 1981 when the State Librarian was given statutory authority to "...promote and support cooperation among the various types of libraries in Pennsylvania for the purpose of increasing the services and resources through libraries...".[8] In 1982-1983, academic libraries participated fully in developing a comprehensive plan of library development.[9] When Access Pennsylvania, the State Library's current long-range plan, was implemented, the role of academic libraries had developed to the point that a Resource Sharing and Academic Libraries Section was created within the State Library to carry out initiatives related to academic libraries.[10] By 1986, it was felt that resource sharing was well under way and that a fuller understanding of the specific concerns of academic libraries was appropriate. To that end, the proposal for this study was approved.[11]

Library literature provides three recent proposals for strengthening relationships between academic libraries and state library agencies.[12] Mitchell proposes improving library service throughout North Carolina by expanding cooperation among libraries of all types, with a special emphasis on academic libraries. The New Jersey document calls for the development of a liaison office in the State Department of Higher Education and full academic library participation in networking. The Montana State Library has recently involved academic libraries in a multitype pilot project to test the feasibility of a statewide union catalog. This study is intended to contribute an empirical

base to the literature which will assist others seeking to achieve more benefit from emerging relationships between academic libraries and state library agencies.

OBJECTIVES AND METHODOLOGY

This study is intended to assess academic library needs that can be addressed by the State Library of Pennsylvania and its' Office of Resource Sharing and Academic Libraries. The study has three objectives:

1. to identify high priority needs among Pennsylvania academic libraries.

2. to differentiate between those high priority needs that are being addressed satisfactorily and those that are not.

3. to collect recommendations from academic librarians on how the State Library might best meet high priority needs that are not being satisfactorily addressed.

A two phase research methodology is employed. The first phase is built around a population survey of Pennsylvania academic libraries to collect data on needs and satisfaction. The survey addresses the first two objectives by identifying loosely defined areas of need and satisfaction. The second phase

uses focus groups, composed of librarians representing a range of academic libraries, to define and to interpret the results of the survey and to recommend appropriate action for the State Library. From a methodological point of view, the two phase research design is useful because it provides an accuracy check on the survey data and because it focuses group discussions on topics where unmet needs are highest and programs are most likely to be developed. The following paragraphs discuss the methodology and response in more detail.

A survey questionnaire was developed to collect information about three broad areas where the State Library might develop or support services of interest to academic libraries in Pennsylvania.[13] In the first section libraries were asked to indicate their need for, use of and satisfaction with eleven activities related to access and sharing of resources. In the second section respondents were asked to identify their need for, use of and satisfaction with eleven technical assistance services related to local library operations. In the third section libraries were asked to indicate the importance of, the extent to which the library addresses and satisfaction with eleven general environmental issues affecting academic libraries. Wording of these questions is reproduced in the appendix.

Respondents were also asked to identify their highest priority concerns overall and within each broad area of concern. Open-ended questions were provided in each broad area to

encourage unique responses. The questionnaire concluded with three demographic questions on networking and automation that could not be answered with available NCES data.[14]

The questionnaire was developed in consultation with State Library personnel and pre-tested in four academic libraries in Maryland. The final draft was reviewed with members of the Pennsylvania Council of Library Networks, an organization composed of representatives from library cooperatives and academic library consortia within the Commonwealth. The questionnaire was mailed to directors of the population of 180 libraries at Pennsylvania post-secondary institutions offering at least a two year degree. A cover letter was included requesting a response by December, 1986. No follow-up mailings were made, but responses were accepted through January, 1987.

Usable responses were received from directors representing 82 libraries or 45.5 percent of the population. Two sample chi-square analyses indicated no significant difference between responding libraries and the population of libraries on four key demographic variables: Carnegie Classification; HEGIS Classification; public or private support; or number of volumes (Table 1). It is assumed that responses reflect the needs and satisfaction levels of Pennsylvania academic libraries.

Responses were analyzed using the SPXX statistical package.[15] Open-ended questions were coded and analyzed.

Marginal data for need or importance, use and for satisfaction are presented in the appendix. Statistical analysis was limited to percentages and chi-squares to facilitate understanding and to encourage discussion in the focus groups.

The second phase of the research was built around meetings with four focus groups selected for their ability to represent important facets of the Pennsylvania academic library community: Associated College Libraries of Central Pennsylvania; Council of Pennsylvania Library Networks; Pennsylvania Community College Libraries; and State System of Higher Education Library Council.[16] Each focus group meeting began with a review of the priorities and satisfaction levels developed from the survey data. Since most of the participants had completed a questionnaire and were familiar with the study, the review quickly summarized the goals and procedures and devoted most of its' time to presenting the analyzed data.

Focus group participants were then guided through a discussion of the data emphasizing three areas of questions. How does this information compare with your understanding of the needs and satisfaction levels of academic libraries in Pennsylvania? What are the issues involved in addressing these needs? What specific activities might the State Library provide that would address these needs effectively? Focus group discussions were collected and assessed. They form an integral part of the analyses and recommendations in this report.

PRIORITIES

At the end of the survey questionnaire, respondents were asked to rank their library's five most critical needs in priority order. A value voting technique was used to analyze these responses. Each respondent's highest priority was assigned a value of five, the second highest priority a value of four and so forth through the five needs listed. Values assigned for each need by all respondents were then summed to arrive at overall need priorities. Recognizing the limited time available for focus groups to review the priorities and to suggest program alternatives, it was decided to limit analysis of priorities to the thirteen needs with the highest value scores. Specific questionnaire wording, percentage of respondents indicating need or importance, percentage of respondents indicating use or address and mean satisfaction levels are provided for each need (Q#) in the appendix.

High need priorities are listed in priority order (Pri#) in Table 2. Respondents indicate three distinct levels of value (Val) for high needs priorities. New technology (e.g. CD ROM, laser discs, micros, etc.) and development of machine readable bibliographic databases including retrospective conversion are the highest priority needs of Pennsylvania academic libraries. Many respondents list these two needs as their first or second priority. The six needs beginning with union lists (e.g.

statewide or regional catalogs, serials lists, manual or automated) and ending with personnel development and status form a second level of high priority. Many respondents list these needs among their top five priorities and some respondents indicate they are their highest priorities. The last five needs form a third set of high priorities. Respondents regularly listed them among their top five priority needs.

Also of interest are the general areas of need priorities (ASI). The questionnaire addresses three general areas: access and sharing of resources (A); provision of library services (S); and issues affecting academic libraries (I). Table two clearly indicates that Pennsylvania academic libraries are not seeking State Library technical assistance or guidance in the direct provision of local library services. Only two provision-related needs, access to bibliographic information and cooperative technical services, appear in the high need priorities and they are near the bottom. Instead, the data indicate that Pennsylvania academic libraries are seeking assistance on access and issues related needs.

Taken as a whole table 2 indicates that focus groups might profitably discuss four areas of need. New technologies, broadly defined as including cdrom, microcomputers and other equipment, machine readable databases, retrospective conversion and other applications, form the highest priority needs. Traditional cooperative activities, including, union lists, reciprocal

borrowing, cooperation with other types, and cooperative technical services, form a second area of need. Infrastructure concerns, including ILL communication networks, telecommunications, linked system protocols and access to bibliographic information form a third set of needs. The three remaining needs, advocacy, personnel development and preservation, can not be grouped under a convenient label and are considered separately.

UNSATISFIED NEED PRIORITIES

To determine which high need priorities are already being addressed satisfactorily, responding academic libraries are asked to indicate the extent to which they address each priority and their satisfaction with their efforts. Table 3 lists high need priorities in ascending order of mean satisfaction (SatisX) measured using a five point Likert scale. The percentage of libraries who are addressing the priority (Address%) and the number of libraries responding (R) on each priority are also provided.

For the purposes of this study, mean values of less than three (3.00) on a five point Likert scale are assumed to identify high need priorities that are not being satisfactorily addressed. The first four priorities in table 3 report mean satisfaction levels of less than three, indicating high priority needs that are not being satisfactorily addressed. Pennsylvania academic

libraries are not satisfied with their efforts to address advocacy of academic library needs in state government, linked online system protocols, telecommunications (e.g. fiber optics, wired campus, microwave, etc.), or new technology (e.g. cd-rom, laser discs, micros, etc.).

Mean values between three (3.00) and four (4.00) on a five point Likert scale are assumed to identify areas that are satisfactory, but open for improvement. Priorities listed between personnel development and access to bibliographic information are needs that Pennsylvania academic libraries report they are reasonably satisfied with, but which they think might be improved to good effect.

Mean values above four (4.00) on a five point Likert scale are being addressed most satisfactorily. Reciprocal borrowing is operating very well among Pennsylvania academic libraries.

A second observation is the strong positive correlation between the percentage of libraries using or addressing a priority need (Address%) and the satisfaction with that area of need (SatisX). Pennsylvania academic libraries seem to be saying that they are reasonably satisfied with what they are addressing, but would appreciate assistance from the State Library on priorities they have not yet been able to address.

FOCUS GROUP RECOMMENDATIONS

High need priorities and unsatisfied need priorities were shared with four focus groups, each composed principally of academic library directors, to develop recommendations on how the State Library Office of Resource Sharing and Academic Libraries should address the needs of academic libraries in Pennsylvania. The four focus groups were: the Associated College Libraries of Central Pennsylvania; the Community College Library Consortium; the Council of Pennsylvania Library Networks; and the State System of Higher Education Library Council. It was felt that each of these groups could make a valuable and unique contribution in interpreting the survey results and recommending appropriate action for the State Library.

Each focus group meeting began with a review of the needs priorities (table 2) and unsatisfied needs (table 3). Participants discussed the information and, in general, confirmed that it reflected their understanding of academic libraries in Pennsylvania. In discussing need priorities, each focus group noted distinctions in interpreting needs data on the basis of size of library and institutional goals. Smaller libraries, for example, were more likely to be interested in direct consultation services, while libraries with research and historical collections expressed very high interest in preservation. The focus groups also pointed out that some needs might best be met by involving other types of libraries, networks and groups to a greater or lesser extent. The following paragraphs summarize

comments on the first four unsatisfied needs and for preservation, each of which were considered appropriate and desireable for the State Library to address.

Advocacy of academic library needs within state government is considered to be a broad priority that can be addressed in a number of ways. Within the state library agency, focus groups recommend that the Office advocate issues and programs that will benefit academic libraries, such as the interlibrary loan compensation plan proposed in Access Pennsylvania[17]. In other agencies of state government, the Office can encourage linkages with academic libraries through grants and contracts. Concurrently, the Office should improve academic library understanding of state government through continuing education on the political and funding processes. The Office can also serve an important function by advocating academic libraries and their campus and community roles to chief executive officers and chief academic officers through state government channels and forums. The advocacy of academic libraries should be based on consultative leadership and a strong program of communication between the Office, academic libraries and interlibrary organizations.

Focus groups indicate the Office should take a leadership role in working among libraries and networks to develop and implement linked system protocols. Two forms of linking are currently perceived, links among bibliographic utilities,

integrated library systems and gateways and links among stand alone library automation systems to form virtual integrated library systems in academic libraries. Addressing the first part of the need will involve other types of libraries and will be guided by Access Pennsylvania programs of reciprocal borrowing, interlibrary loan compensation and the statewide union catalog. Addressing individual library needs will be through evaluating stand alone systems and recommending them on the basis of compatibility with statewide plans.

Telecommunications development for Pennsylvania libraries of all types should be focused in the Office of Resource Sharing and Academic Libraries. The Office has already undertaken a study of Pennsylvania telecommunications that is considered a model. New developments in fiber optics, microwave and cable should continue to be assessed for their ability to meet library needs for voice and data grade communications throughout the Commonwealth. The Office should plan and initiate new communication patterns among libraries when appropriate.

Academic libraries would like to have access to objective information and evaluations of new technology for libraries. They believe this is an appropriate consultative role for the state library agency in that it has an interest in being able to link libraries for resource sharing as well as general library welfare. Academic libraries would like information on both hard and software for library automation, integrated library systems,

and gateways for information in electronic formats, as well as the telecommunications and linked systems previously mentioned.

Academic libraries with research and historical collections and libraries that make use of these collections want the Office to undertake a leadership position in preservation. These collections range from non-print materials in junior colleges to manuscripts and unique holdings in college library special collections and the collections of the major research libraries. Focus group participants first want the Office to arrange access to a preservation facility, either guiding the development of a cooperative effort or by contracting with an existing operation. Second, academic libraries want consultative assistance to determine what they should do locally to preserve their collections. They believe the Office is an excellent locus for preservation activity throughout the Commonwealth.

SUMMARY AND RECOMMENDATIONS

The purpose of this study has been to identify needs of Pennsylvania academic libraries that can be addressed by the State Library's Office of Resource Sharing and Academic Libraries. The questionnaire gathered information on need priorities and levels of satisfaction. The use of focus groups provided guidance to the Office on how it might best address unsatisfied, high priority needs, while, at the same time building consensus in the academic library community supporting

State Library actions. The following recommendations are intended to integrate survey findings and focus group discussions on strengthening relationships between academic libraries and the State Library of Pennsylvania.

RECOMMENDATION 1

The Office should advocate academic library needs in Pennsylvania by:

1. advocating the specific interests of academic libraries, such as interlibrary loan compensation, within the state library agency.
2. encouraging the development of linkages between academic libraries and units of state government, including grants and contracts where appropriate.
3. using units of state government to promote the campus and community role of academic libraries to academic and local government leaders.
4. improving academic libraries uniderstandinf of state government through continuing education on the political and funding process.
5. communicating with academic libraries and state government through a strong program of communication, including a newsletter.

RECOMMENDATION 2

The Office should provide leadership and coordination for statewide linked systems, telecommunications and preservation efforts by:

6. developing and maintaining staff expertise on multi-library

aspects of linked systems, telecommunications and preservation.

7. advocating the needs of academic libraries to telecommunications and linked systems organizations, library networks, and interested units of state government.
8. encouraging the development of funding for initiatives promising to address statewide aspects of linked systems, telecommunications and preservation.
9. communicating results to Pennsylvania library networks and consortia serving academic libraries.

RECOMMENDATION 3

The Office should provide consulting and technical advice to academic librarieson on local integrated library systems, campus telecommunications, new technology and preservation techniques by:

10. providing adequate staff or consultant assistance to meet the general operating concerns of academic libraries.
11. encouraging funding for initiatives intended to demonstrate solutions to local library concerns for integrated library systems, campus telecommunications, new technology and preservation techniques.
12. communicating the findings of these efforts and other activities of interest to academic libraries.

RECOMMENDATION 4

To fully address the previous recommendations, the Office will have to be strengthened by:

13. providing additional personnel and consultants with expertise in linked systems, telecommunications, new technologies and preservation.
14. developing the means for communicating academic library needs in the state library agency, state government, the academic and the general community as well as academic libraries.
15. granting authority to work directly with other units of government, the private and the academic community.

Academic libraries are looking to the State Library for leadership. This report identifies areas of special opportunity. By implementing these recommendations, the State Library of Pennsylvania will strengthen the academic library community in Pennsylvania and help achieve the goals of Access Pennsylvania.

Results of this research suggest that the State Library begin its' efforts to support academic libraries by developing programs and activities that address five high priorities that also report high unsatisfied need.

Table 1

Tests for Differences Between Population and Respondents

Variable	Chi-square Observed	Chi-square .01	df
Carnegie Classification	9.477	13.277	4
HEGIS Classification	14.844	15.086	5
Public/Private	.476	6.634	1
Number of Volumes	9.823	13.277	4

Table 2

High Need Priorities

Need Priority	Pri#	Val	ASI	Q#
New technology	1	128	I	30
Machine-readable biblio. databases	2	104	A	10
Union lists	3	78	A	1
Reciprocal borrowing	4	75	A	4
Cooperative relations w/ other types	5	70	I	31
ILL communication networks	6	70	I	28
Advocacy of academic library needs	7	69	I	26
Personnel development & status	8	67	I	32
Telecommunications	9	49	I	29
Linked online system protocols	10	48	I	25
Access to bibliographic information	11	42	S	14
Preservation of library materials	12	42	A	2
Cooperative technical services	13	41	S	12

Table 3

Unsatisfied Need Priorities

Need Priority	SatisX	Address%	R
Advocacy of academic library needs	2.00	16.9	65
Linked system protocols	2.64	17.0	53
Telecommunications	2.64	32.8	58
New technology	2.90	43.8	80
Personnel development	3.11	62.2	65
Preservation of library materials	3.16	30.5	59
ILL communication networks	3.35	68.9	73
Machine-readable databases & retrocon	3.65	48.5	66
Union lists & catalogs	3.72	100.0	78
Cooperation w/ other types of libraries	3.83	80.3	76
Cooperative technical services	3.97	58.0	50
Access to bibliographic information	3.97	93.8	64
Reciprocal borrowing	4.09	91.5	82

APPENDIX A: QUESTIONNAIRE ITEMS AND MARGINAL DATA

Item	R	Address%	SatisX
1. Union lists (e.g. statewide or regional catalogs, serials lists, manual or automated).	82	100.0	3.72
2. Preservation of library materials (e.g. deacidification, microform, last copy storage, etc.).	59	30.5	3.16
3. Cooperative collection development	58	24.1	3.20
4. Reciprocal borrowing agreements	82	91.5	4.09
5. Evaluation of automated library systems (e.g. circulation, catalog, acquisitions, ILL, etc.).	72	31.9	3.39
6. Evaluation of equipment (e.g. furniture, library equipment, microcomputers, etc.).	69	37.7	3.12
7. Cooperative purchasing (e.g.	53	50.9	3.19

materials, supplies, equipment, systems, etc.).			
8. Cooperative collections of non-print materials (e.g. film, microcomputer software, etc.).	62	43.5	3.43
9. Cooperative contracting for services (e.g. online databases, service contracts, etc.).	69	56.5	3.55
10. Development of machine readable bibliographic databases, and retrospective conversion.	66	48.5	3.97
11. Other: _____	8	NA	NA
12. Cooperative technical services (e.g. joint acquisitions, cataloging, periodicals, etc.).	50	58.0	4.13
13. Guidance in technical services (e.g. consulting).	47	40.4	4.05
14. Access to bibliographic information (e.g. MARC, NUC, etc.).	64	93.7	4.05

15. Cooperative reference services (e.g. reference referral, joint online searching, etc.).	52	55.8	3.50
16. Guidance in reference services (e.g. consulting).	40	30.0	3.85
17. Cooperative access services (e.g. shared circulation, reserve, etc.).	28	25.0	3.30
18. Guidance in access services (e.g. consulting)	34	5.9	3.50
19. Guidance in administrative services (e.g. consulting).	40	22.5	4.27
20. Guidance in facility design and development (e.g. consulting).	56	23.2	4.07
21. Clearinghouse (e.g. exemplary models, policies, consultant lists, etc.).	64	18.7	3.14
22. Other _____	3	NA	NA
23. Intellectual freedom	54	68.5	3.78
24. Electronic information (e.g.	62	43.5	3.78

statistical datafiles, digitized test, etc.).			
25. Linked online system protocols	53	17.0	2.64
26. Advocacy of academic library needs	65	16.9	2.00
27. Institutional contracting for library services (e.g. new Federal policy).	28	14.3	3.63
28. Interlibrary loan communication (e.g. IDS, electronic bulletin boards, telefacsimile, etc.).	74	70.3	3.39
29. Telecommunications (e.g. fiber optics, wired campus, microwave, etc.).	58	34.5	2.64
30. New technology (e.g. CD-ROM, laser discs, micros, etc.).	80	43.7	3.60
31. Cooperative relations with other types of libraries.	76	80.3	4.08
32. Library personnel development and status.	74	62.2	3.37

33. Other _____	1	NA	NA

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